

Resilient San Francisco

Advancing San Francisco's Climate Adaptation Plan

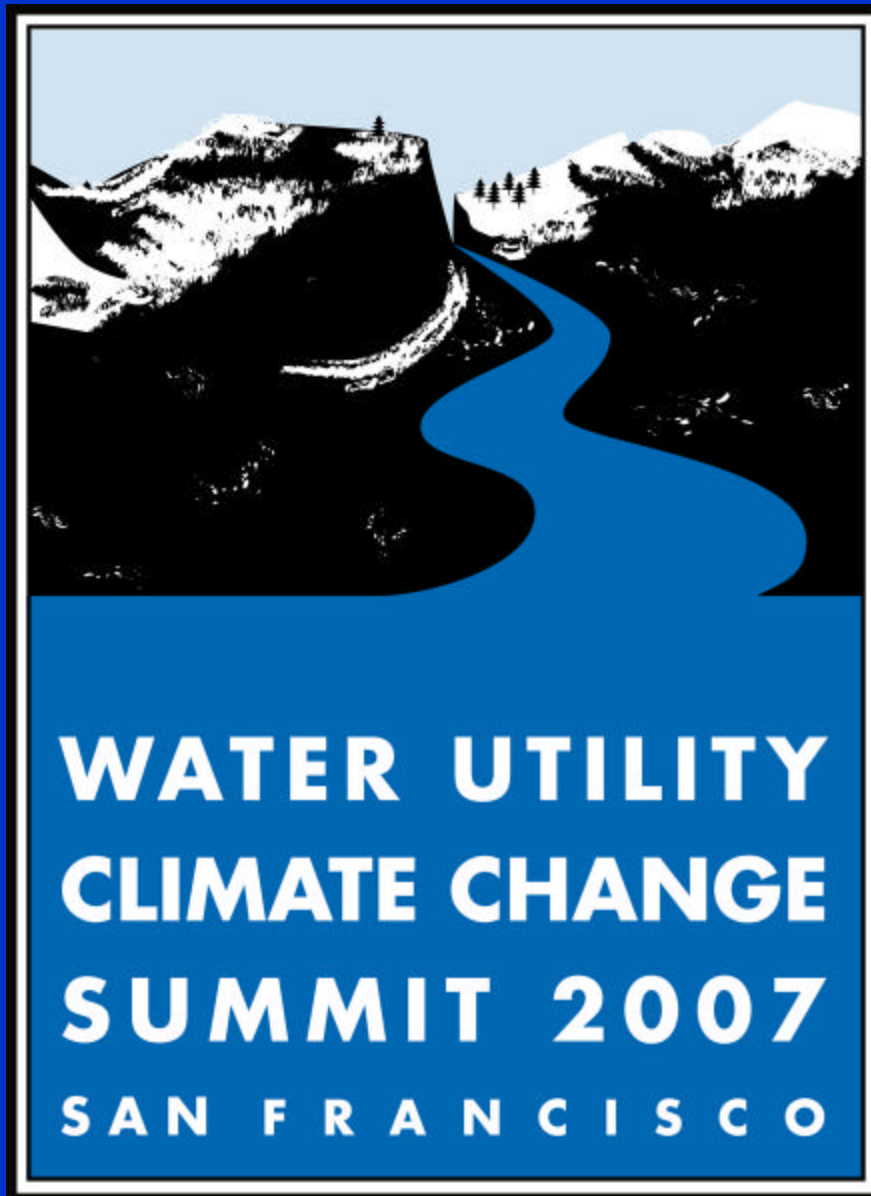
Wade Crowfoot, Office of Mayor Gavin Newsom
BAAQMD Conference: May 4, 2009



San Francisco's move to adaptation in context

- San Francisco Climate Action Plan (2004): 20% reduction in carbon emissions below 1990 levels by 2012.
- Almost 100% of our focus has been on mitigation
- Growing sophistication of our capital planning system within City Government
- San Francisco PUC a leader in early thinking on adaptation
- Other local jurisdictions are racing forward on adaptation planning: King County (WA.), New York City, Chicago





Water Utility Climate Alliance

- Formalized February 2008
- Chaired by San Francisco PUC, includes New York City, Denver, Metropolitan, San Diego County, Seattle, Portland, Southern Nevada
- Focus: Adaptation response, GHG leadership
- Committees:
 - 1) Science
 - 2) Decision Support
 - 3) Greenhouse Gas Emissions
 - 4) Communications



Why Adaptation?

Likely changes to our local environment

- Rising sea levels
- Increased frequency of extreme weather events
 - Storm surges
 - Intense precipitation
 - Heat waves
- Increase variability of precipitation
- Decreased snowpack in the Sierra Mountains



Why Adaptation?

Our vulnerabilities to these weather changes

Planning

- Large portion of our city at low lying levels
- Key upcoming developments are along the Bay shore

Infrastructure

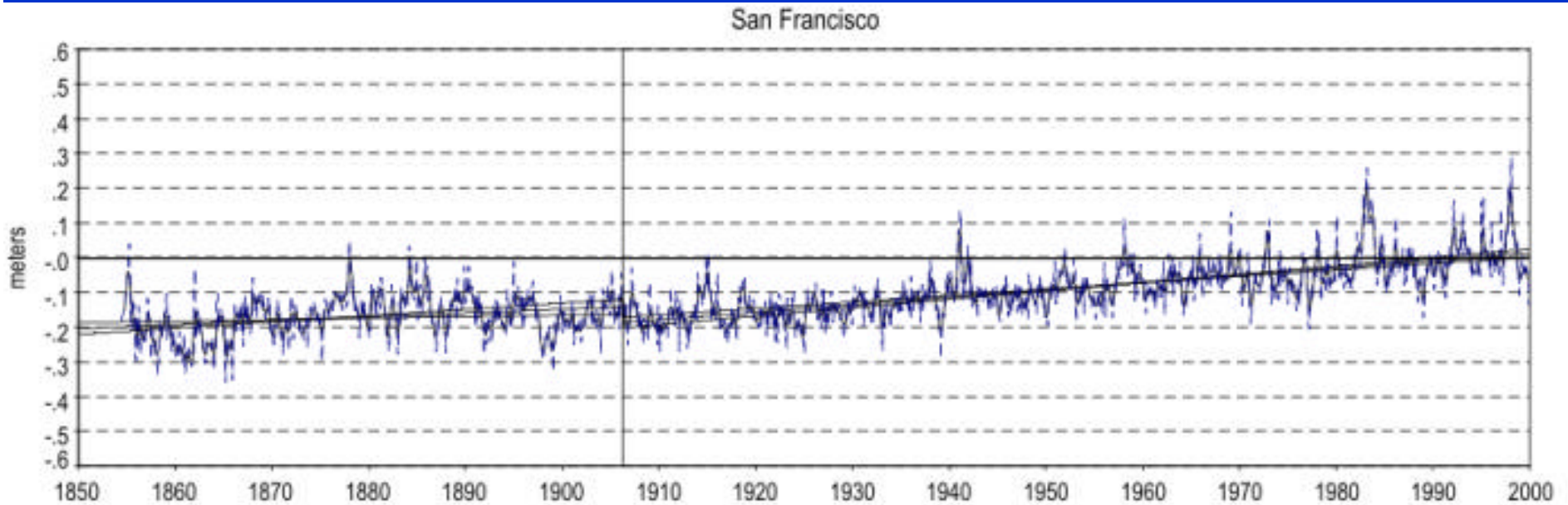
- Aging Port piers and seawalls
- Wastewater system that could be infiltrated by rising sea levels

Resource Scarcity

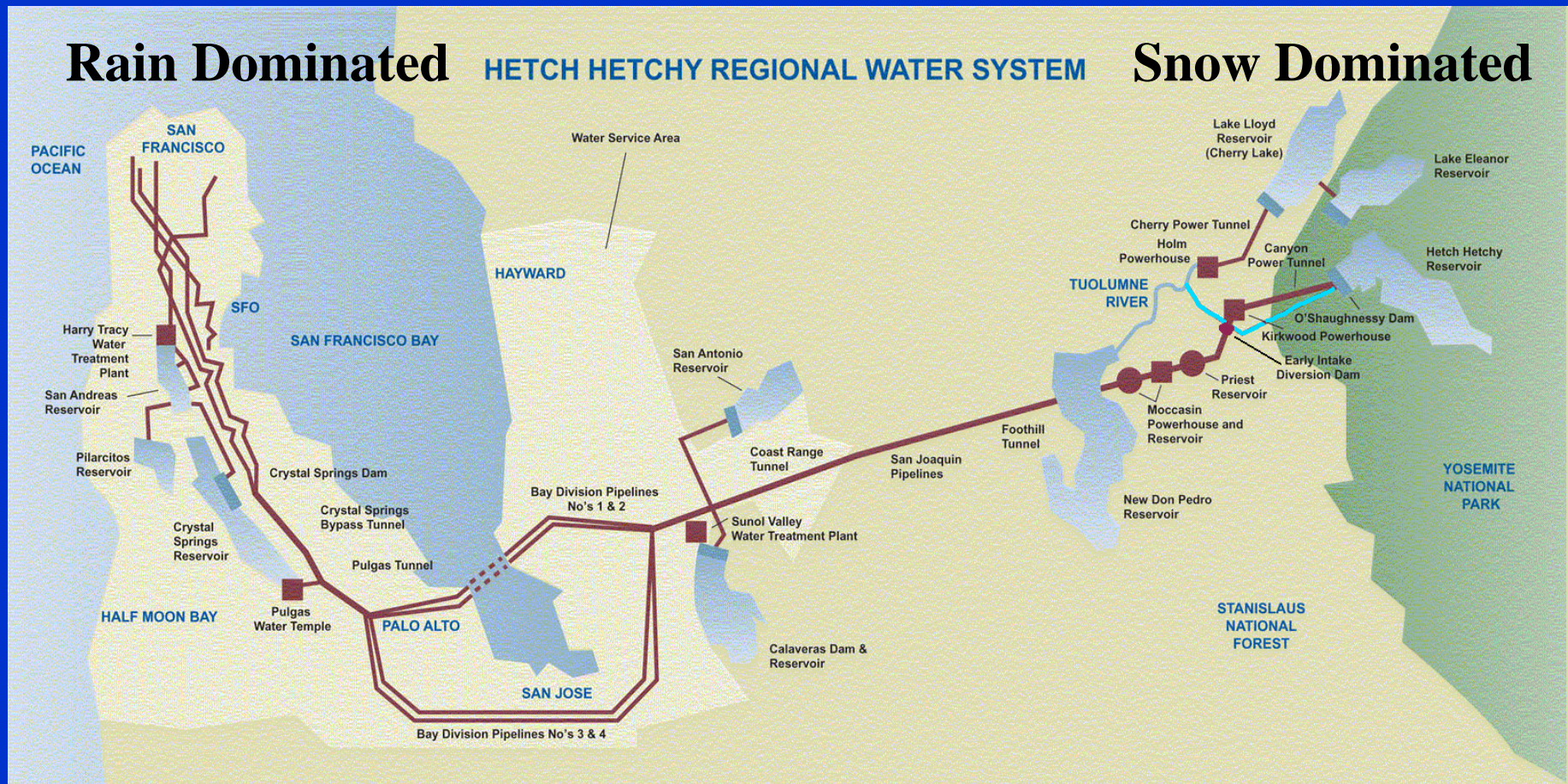
- Dependency on Sierra snow to provide drinking water



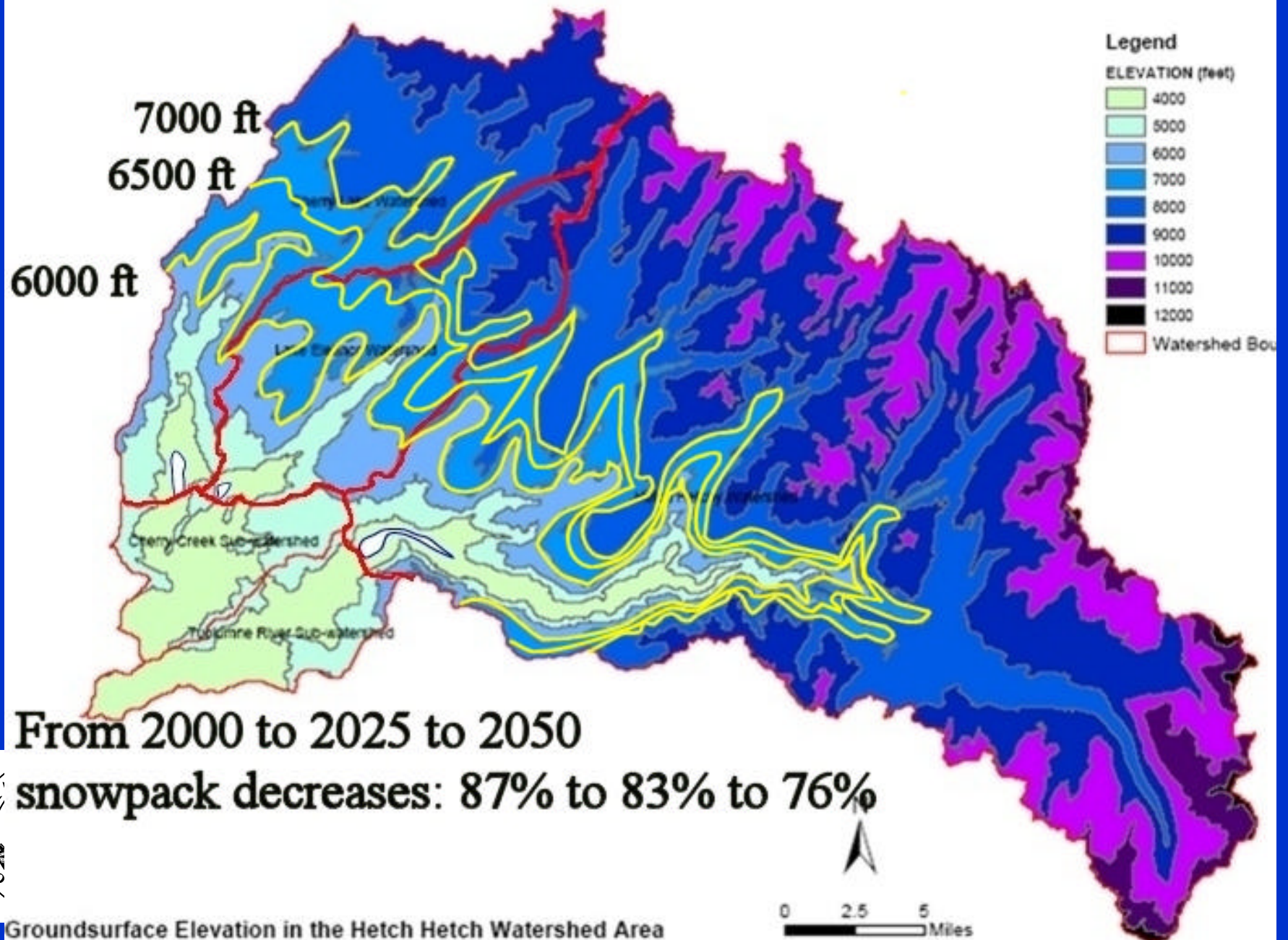
Monthly Mean Sea Level, Presidio, San Francisco 1854 -- 2000



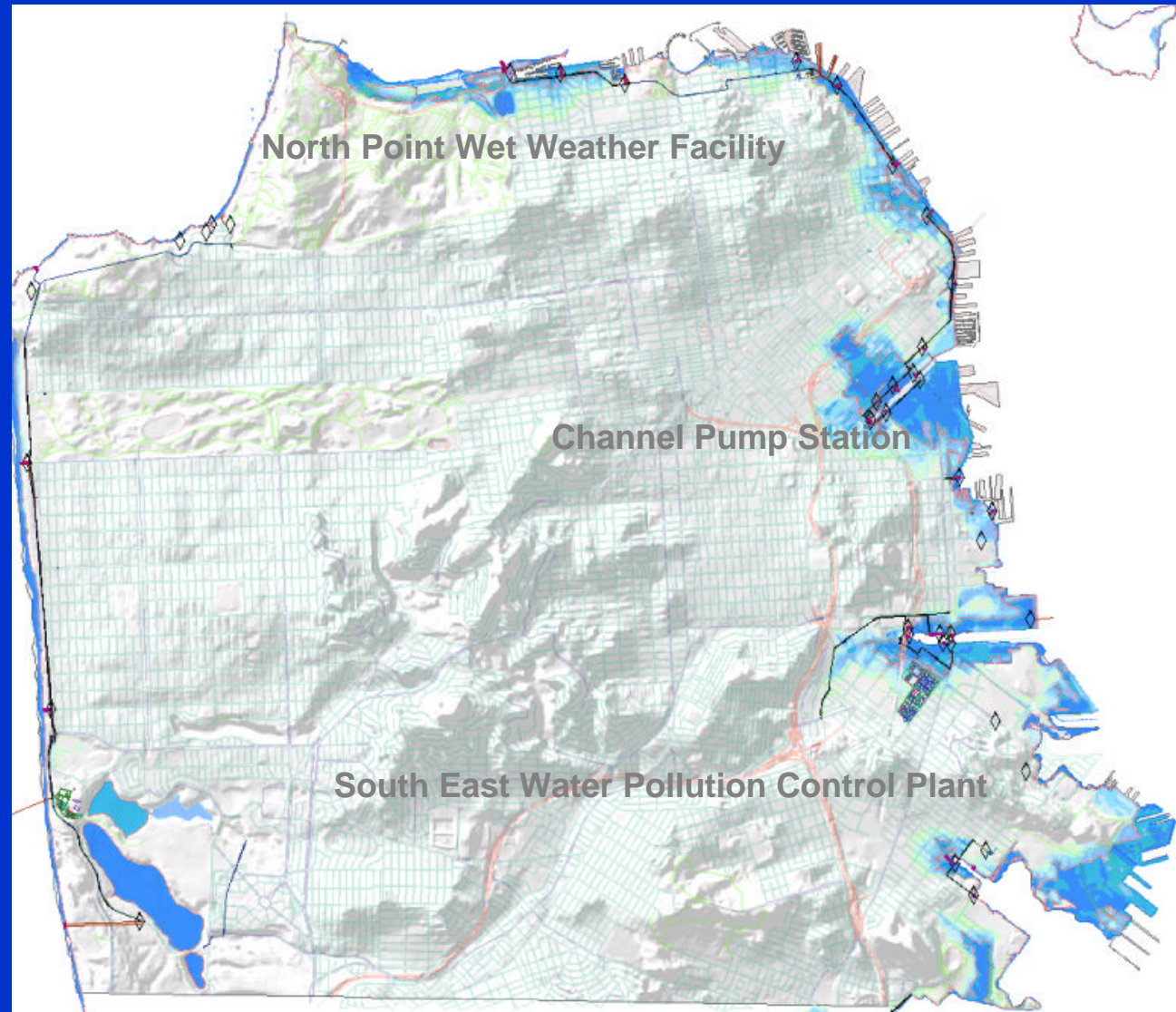
SFPUC Water System



Effect of Rising Snowline



Wastewater Structures at Risk with Sea Level Rise of 3 feet



Potential Goals of Resilient San Francisco

- Adopt uniform climate change projections for San Francisco (& Bay Area?)
- Create coordinated adaptation plans for all stakeholders responsible for critical infrastructure (public and private)
- Draft design guidelines for new infrastructure
- Incorporate climate change adaptation into existing capital planning processes

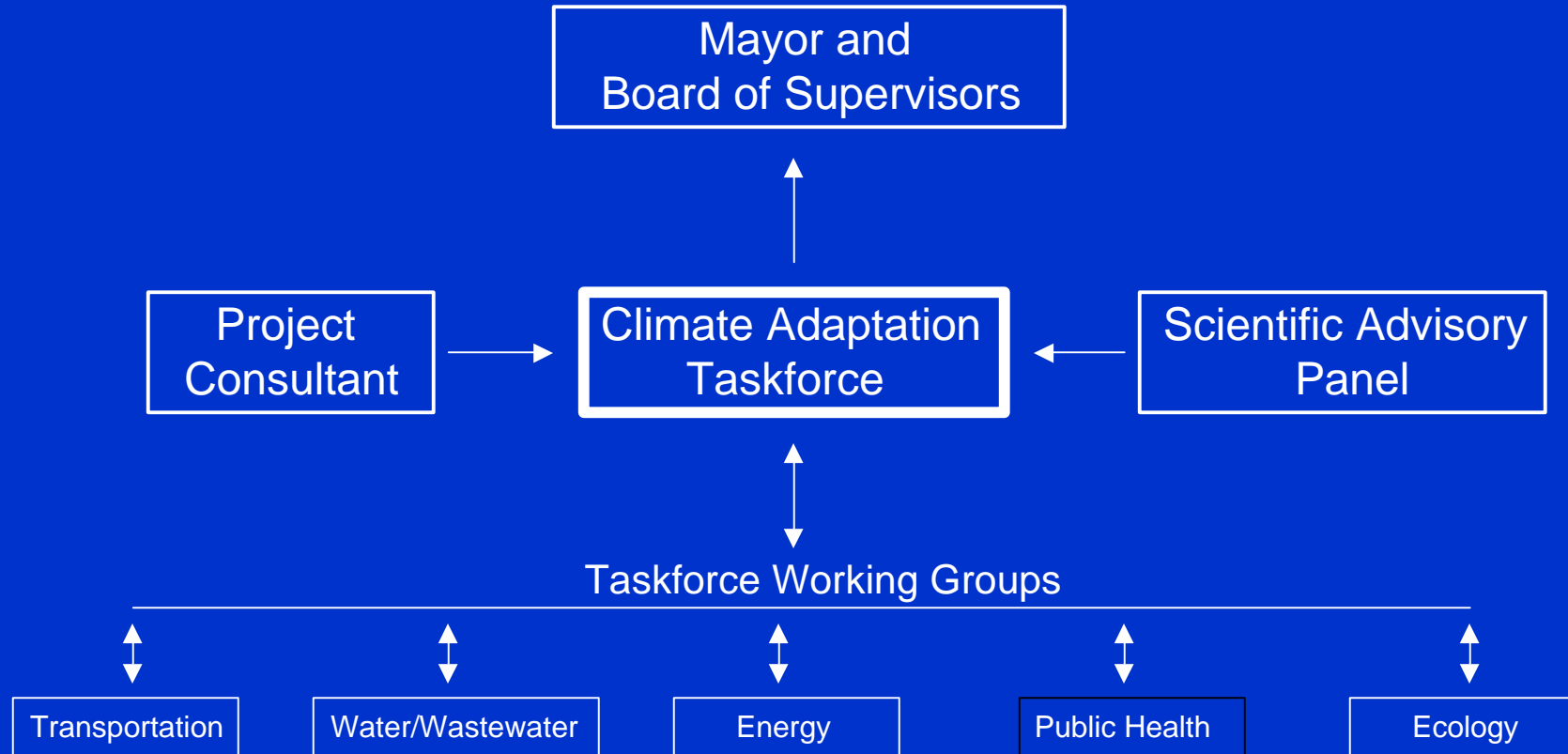


Groups within the Adaptation Planning Process

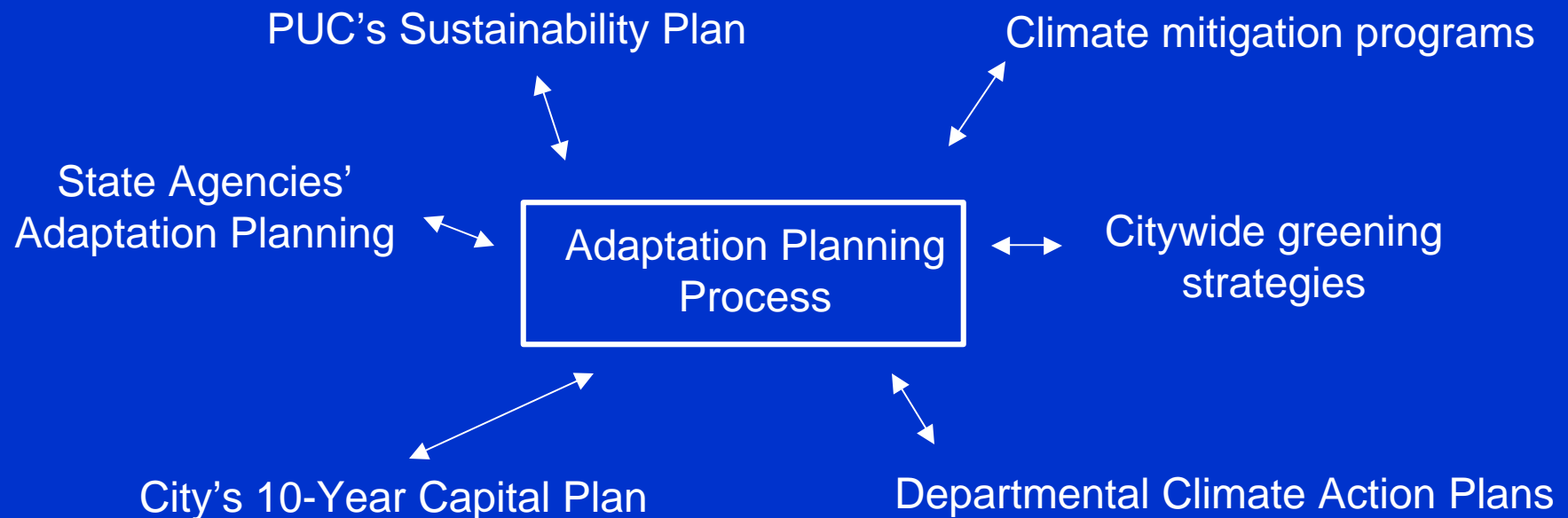
- Climate Adaptation Taskforce: Key City and non-governmental stakeholders, will develop Adaptation Plan's recommendations.
- Taskforce Working Groups: Will consider climate change's impact on areas of the built environment. Includes participants that may not be part of the larger Taskforce.
- Project Consultant: Identifies anticipated climate impacts on San Francisco including the range and probability of these impacts, helps Taskforce understand how these impacts inform long-term planning.
- Scientific Advisory Panel: Directs consultant to existing data and analysis on regional climate impacts, reviews projections of anticipated impacts, and provides ongoing technical expertise to Taskforce.



Adaptation Planning Structure



Other plans and strategies that Adaptation Plan must consider



Boston Group: Keys to success

- Government champion
- Broad team composition (public, private, academic)
- Senior-level involvement from stakeholders
- Well-structured process

